

Orchestoidea benedicti, n. sp.

Figure 3

Type-locality.—San Diego, California (littoral marine), collected by Frank F. Gander, April, 1927; 1 male holotype (Cat. No. 62962, U.S.N.M.).

Male.—Head about as long as first thoracic segment, eye of medium size, very nearly circular, black and composed of many small elements. Antenna 1 scarcely reaching to the middle of fourth joint of antenna 2, flagellum half the length of peduncle and composed of four joints the last of which is very small. Antenna 2 very short and stout, fourth joint about twice as long as wide, fifth joint twice as long as fourth and only four times as long as wide, flagellum a little over half as long as fifth peduncular joint, first four joints of flagellum coalesced forming one long joint about equal in length to the remaining seven. Mandible, cutting edge with three large stout teeth and three or four smaller ones, secondary plate well-developed, four plumose spines, two of which are larger than the others, in spine-row, molar well-developed, and bearing a brush of plumose setae at base. Maxilla 1, inner plate long and slender and bearing two plumose spines on apex, outer plate longer than inner and bearing nine serrate spine-teeth on the obliquely truncated end, palp very small consisting of a slender basal joint and a very minute terminal joint. Maxilla 2, inner plate narrower and slightly shorter than outer, distal end very obliquely truncated and bearing a long plumose seta at lower obtuse angle, outer plate evenly rounded distally and armed with many long curved spines. Maxillipeds, inner plates long and slender, reaching to or a little beyond the middle of the outer plate, and armed on the transversely truncated end with three short spine-teeth and row of plumose setae, outer plate small and short, reaching to about the middle of the second joint of palp, the rounding apex bearing several plumose setae, and the inner edge bearing a row of closely set short spines, palm short and broad, the inner distal angle of second joint produced into a broad lobe, lower lip with lateral lobes short and broad. Gnathopod 1 about normal, fifth joint bearing on lower margin a short rounding lobe, sixth joint bearing at the lower posterior angle a low soft lobe which gives the joint the appearance of having a very short palm. Gnathopod 2, sixth joint very large and powerful and roughly oval in outline, the oblique palm consisting of a large spinose tooth and a deep depression adjacent to the hinge of the seventh joint, the palm is defined by a low rounding angle and a short stout spine, the oblique surface of the large tooth bears several additional stout spines some of which project forward on either side of the seventh joint when it is closed against the palm, seventh joint very stout and strongly curved and slightly overlapping palm, inner edge bearing a row of very short spinules. Peraeopod 1 much longer than 2. Peraeopod 3 about equal in length to 2, second joint broadly expanded. Peraeopods 4 and 5 subequal in length, second joint of 5 more widely expanded than that of 4. Abdominal segments 1-3 with lower posterior corners slightly produced into short acute points. Uropod 1 extending farther back than 2 which is farther produced than 3. Uropod 1, peduncle longer than the rami, the outer of which is the longer, peduncle and rami bearing spines on all their edges. Uropod 2, peduncle equal in length to outer ramus which is slightly shorter than inner, the edges of both peduncle and rami bearing spines, those of the peduncle being longer than the rest. Uropod 3, peduncle shorter than ramus. Telson about as wide as long, the sides converging to a narrowly rounded apex, several spines on the upper surface and a cluster on the rounding apex.

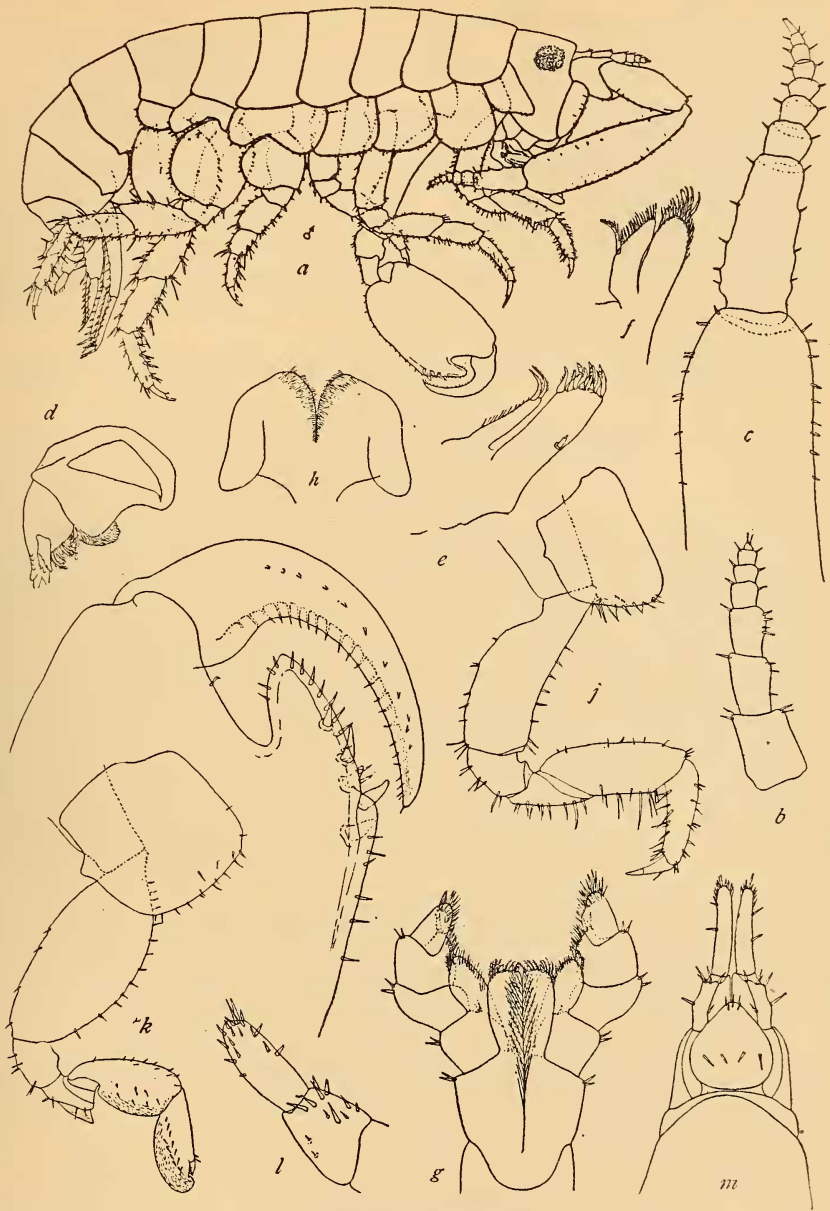


Fig. 3.—*Orchestoidea benedicti*, new species. Male, *a*, Entire animal. *b*, Antenna 1. *c*, End of fifth joint and flagellum of antenna 2. *d*, Right mandible. *e*, Maxilla 1. *f*, Maxilla 2. *g*, Maxillipeds. *h*, Lower lip. *i*, End of sixth joint and seventh joint of gnathopod 2, enlarged. *j*, Gnathopod 1, female. *k*, Gnathopod 2, female. *l*, Uropod 3. *n*, Telson and third uropods from above.